

Erosion Control for Residential Construction

Town of Hillsborough Information Sheet

By volume, sediment is North Carolina's number one stormwater pollutant. Accelerated erosion resulting from human activity accounts for approximately 70% of the sediment reaching our streams, lakes and rivers. Excessive sediment significantly impacts <u>our</u> local waterways and <u>your</u> bank account. In fact, excess sediment:

- fills up storm drains and catch basins increasing the potential for flooding;
- lowers visibility in the water, preventing animals from seeing food and reduces the growth of natural aquatic vegetation;
- increases the cost of treating drinking water and can result in odor and taste problems;
- disrupts the natural food chain by destroying the habitat where the smallest stream organisms live causing declines in fish populations;
- can transport excess nutrients which can activate blue-green algae that release toxins and can make swimmers sick;
- can clog fish gills, reducing resistance to disease, lowering growth rates, and affecting fish egg and larvae development;
- requires expensive dredging to maintain drinking water intakes;
- deposits in rivers can alter the flow of water and reduce water depth, which makes navigation and recreational use more difficult.

The most concentrated sediment releases come from construction activities. For this reason, the Town of Hillsborough contracts with the Orange County Erosion Control Department to review and approve erosion control plans and inspect construction sites.



Excess sediment lowers visibility, impairs navigability and increases the cost to treat drinking water.



Excess sediment impairs aquatic ecosystems, reduces fish populations and reduces recreation.

Erosion Control for Residential Construction

- 1. Limit clearing to the minimum necessary
- 2. Install and maintain silt fence on the downstream side of the project
- 3. Install and maintain a silt fence outlet
- 4. Sweep roadways and driveways regularly.
- 5. Install a gravel construction entrance
- Limit the number of vehicles that drive on bare soils.
- 7. Keep vehicles off of bare soils when raining or wet.
- 8. Stabilize the construction site with suitable mulch and grass seed within 7 days of completing the project.
- 9. For new construction, installing sod is a great way to stabilize the site.
- 10. Watch the weather and plan accordingly.



Example of proper silt fence installation; be sure to trench in the bottom.

Continued from front page

Land disturbance of 20,000 square feet or more <u>requires</u> an approved erosion control plan and permit from Orange County <u>before</u> clearing for construction can begin.

However, even small projects under the 20,000 square foot threshold can result in significant sediment laden stormwater runoff. Single family residential construction, including minor projects such as room additions, garages, and swimming pools can result in significant amounts of sediment leaving the site.

To combat this, the Town of Hillsborough requires that best management practices be followed. These include installation of silt fence and silt fence outlets as appropriate. It should be noted that any sediment from construction that reaches a stormwater conveyance such as a ditch, pipe, catch basin, inlet, culvert or waterway is considered an Illicit Discharge pursuant to the Town of Hillsborough municipal code,

and is subject to a violation with possible civil penalties.

So do your part and keep excess sediment out of our local streams and the Eno River by following best management practices for your next construction project.



Example of proper silt fence outlet; be sure to use clean #57 stone.

Stormwater and Environmental Services Division 101 E. Orange St.

PO Box 429, Hillsborough, NC 27278

919-296-9621 | terry.hackett@hillsboroughnc.gov

